



State Revolving Fund Loan Programs

Drinking Water, Wastewater, Nonpoint Source

ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT

CITY OF INDIANAPOLIS HILL VALLEY ESTATES SEWER/MANHOLE REHABILITATION/REPLACEMENT DPW # SS-46-003; PER 6A-10

DATE: November 24, 2008

COMMENTS MUST BE RECEIVED BY: December 24, 2008

I. INTRODUCTION

The above entity has applied to the Clean Water State Revolving Loan Fund (SRF) for a loan to finance all or part of the wastewater project described in the accompanying Environmental Assessment (EA). As part of facilities planning requirements, an environmental review has been completed which addresses the project's impacts on the natural and human environment. This review is summarized in the attached EA.

II. PRELIMINARY FINDING OF NO SIGNIFICANT IMPACT (FNSI)

The SRF Clean Water Program has evaluated all pertinent environmental information regarding the proposed project and determined that an Environmental Impact Statement is not necessary. Subject to responses received during the 30-day public comment period, and pursuant to Indiana Code 4-4-11, it is our preliminary finding that the construction and operation of the proposed facilities will result in no significant adverse environmental impact. In the absence of significant comments, the attached EA shall serve as the final environmental document.

III. COMMENTS

All interested parties may comment upon the EA/FNSI. Comments must be received at the address below by the deadline date above. Significant comments may prompt a reevaluation of the preliminary FNSI; if appropriate, a new FNSI will be issued for another 30-day public comment period. A final decision to proceed, or not to proceed, with the proposed project shall be effected by finalizing, or not finalizing, the FNSI as appropriate. Comments regarding this document should be sent within 30 days to:

Max Henschen
Senior Environmental Manager
State Revolving Fund -- IGCN 1275
100 N. Senate Ave.
Indianapolis, IN 46204
317-232-8623

ENVIRONMENTAL ASSESSMENT

I. PROJECT IDENTIFICATION

Project Name and Address: **Hill Valley Estates Sewer Rehabilitation**
DPW # SS-46-003; PER 6A-10
City of Indianapolis Dept. of Public Works
2460 City-County Building
200 East Washington Street
Indianapolis, IN 46204

Authorized Representative: David Sherman, Director
Department of Public Works

II. PROJECT LOCATION

Hill Valley Estates is located in Perry Township in the south central part of Marion County; it is generally bounded by Meridian School Road on the North, County Line Road on the South, Railroad Road on the West, and East Street on the East. The project is in the Maywood USGS quadrangle, T14N, R3E, section 23. The project area and the locations where the work will occur are shown on Figure 1.

III. PROJECT NEED AND PURPOSE

During wet weather, flows in the Hill Valley Estates sanitary sewer system exceed its capacity. Inflow and infiltration (I/I) enter the sewer at cracks or loose joints, leaking manholes, private laterals and cleanouts, and illegal connections. An exposed sewer in the ephemeral creek near Beechview Lane also needs replacement to prevent possible future failure.

The city performed a sewer study in the project area from July, 2007 to January, 2008. The study consisted of television and visual inspection of sewer rehabilitation work completed in 2006, as well as an evaluation of the hydraulic capacity of the sewers tributary to the South Marion County Regional Interceptor (SMCRI) sewer. The study recommended the proposed project.

The study recommended the following work to address the Hill Valley Estates sewer problems:

The project area's future population is not expected to change, since the area is completely developed. This project will not increase wastewater flows or loadings; it will decrease flows attributed to I/I. The 96-inch diameter SMCRI downstream interceptor has sufficient capacity to convey flows from this area.

IV. PROJECT DESCRIPTION

- A. Rehabilitation via Cured in Place Pipe lining of approximately 331 linear feet of 8-inch sanitary sewer, 330 linear feet of 10-inch sanitary sewer and 1,817 linear feet of 12-inch diameter sanitary sewer. CIPP lining is a trenchless technology; no excavation is required.
- B. Connection of the rehabilitated 12-inch sewer to the 96-inch diameter SMCRI via the installation of approximately 24 feet of 12-inch sewer and 9 feet of 24-inch Poly Vinyl Chloride (PVC) sewer and two new manholes; this connection will improve system hydraulics and provide access for maintenance.
- C. Rehabilitation of 5 manholes.
- D. Replacement of the 12-inch sewer exposed in the ephemeral creek near Beechview Lane with approximately 96 feet of new 12-inch Ductile Iron sewer and installation of a new manhole to connect the proposed sewer to the existing sewer upstream. The new line will be placed beneath the stream bed.
- E. Abandonment of a 15-inch sanitary sewer line between proposed MH410150 and existing MH410149 to eliminate numerous defects.

V. ESTIMATED PROJECT COSTS, AFFORDABILITY AND FUNDING

A. Selected Plan Estimated Cost Summary:

| | |
|-------------------------------|-----------|
| Design | \$ 50,000 |
| Construction | \$400,000 |
| Inspection | \$ 50,000 |
| Total Estimated Project Cost: | \$500,000 |

- B. Indianapolis plans to finance the project through an existing SRF Loan. Affordability and financial analysis were performed by the city prior to the loan closing.

VI. DESCRIPTION OF EVALUATED ALTERNATIVES

- A. No Action: Under the “no action” alternative, no efforts would be made to repair or rehabilitate the sewers and manholes in this area. The system would further deteriorate, so this alternative was rejected.
- B. Rehabilitation and Replacement of Sewer Segments and Manholes: Under this alternative, manhole and sewer rehabilitation will be completed. In addition, the 12-inch sanitary line exposed in the creek at Beechview Lane will be replaced, a new sewer connection to the SMCRI from MH410150 on the east side of German Park will be constructed, known pipe stubs will be abandoned, and a pipe segment will be abandoned between MH410150 and MH410149 due to the new sewer connection to the SMCRI. This course of action will reduce I/I and restore structural and functional integrity to the sanitary sewer system. This is the selected alternative, based on cost effectiveness, practicality, technical feasibility, reliability, ease of implementation and environmental soundness.

VII. ENVIRONMENTAL IMPACTS OF THE FEASIBLE ALTERNATIVES

A. Direct Impacts of Construction and Operation

Undisturbed Land: The project will occur on land which has been significantly disturbed by previous construction activity. The rehabilitation and replacement associated with the sewers and manholes will be performed within the existing sewers and sewer trenches. The project will not affect archaeological resources.

Structural Resources (Figures 2 and 3): The project will not affect historic sites. The SRF's finding pursuant to Section 106 of the National Historic Preservation Act is: "*no historic properties affected.*"

Biota: The construction and operation of the project will not negatively impact state or federal-listed endangered species or their habitat. Trees located along the banks of the creek within a proposed 40-foot construction easement will be removed as needed to allow for sewer construction. Effects from construction at this location will be temporary and the restoration effort will include planting trees in cleared areas.

Wetlands (Figure 1): The project will not affect wetlands designated on the National Wetlands Inventory Map.

Surface Waters (Figure 2): Impacts to waterways will be limited to the stream in which a 12-inch sewer will be replaced. Work will be performed outside of stream corridors and riverine wetlands by using trenchless technologies, with the exception of work to be performed within the corridor of the ephemeral stream near Beechview Lane. A temporary coffer dam will be erected there, and the 12-inch sewer will be replaced using open cut construction. Impacts will be limited and effects will be temporary. The sewer which crosses Buffalo Creek northwest of Golden Tree Lane and west of Meridian Street will be a rehabilitated through trenchless technology. The project will not adversely affect Exceptional Use streams, Outstanding State Resource waters or Natural, Scenic and Recreational Rivers and Streams.

Floodplain (Figure 4): The project is partially within the 100-year floodplain of Buffalo Creek. The floodplain will not be adversely impacted by this rehabilitation project.

Groundwater: The project will not impact a groundwater drinking water supply or sole source aquifer.

Prime Farmland: The proposed project will not cause a conversion of prime farmland.

Natural National Landmarks: Construction and operation of the proposed project will not impact Natural National Landmarks.

Air Quality: Construction activities may generate some noise, fumes and dust normally resulting from such activity. The dust, fumes and noise are short-term impacts, lasting only during the construction phase. Construction activities should not impact ozone, airborne pollutants or other current or future air quality concerns.

Open Space and Recreational Opportunities: The proposed project's construction and operation will neither create nor destroy open space and recreational opportunities.

B. Indirect Impacts

The city's Preliminary Engineering Report (PER) states: *The City through the authority of its Council, planning commission, or other means will ensure that future development, as well as future collection system or treatment works projects connecting to State Revolving Funds (SRF) funded facilities, will not adversely impact wetlands, archaeological/historical/structural resources, or other sensitive environmental resources. The City will require new development and treatment works projects to be constructed within the guidelines of the U.S. Fish and Wildlife Service, Indiana Department of Natural Resources (IDNR), Indiana Department of Environmental Management (IDEM), and other environmental review authorities.*

C. Comments by Environmental Review Authorities

This assessment serves as the first notice to most agencies, since the project will occur on previously disturbed land or in existing structures, and wetlands, wooded areas or other sensitive resources will not be adversely impacted.

The Natural Resources Conservation Service has determined that the project will not affect prime farmland.

VIII. MITIGATION MEASURES

The city's PER lists the following mitigation measures:

The project will be implemented to minimize impact to non-endangered species and their habitat. Mitigation measures cited in comment letters from the Department of Natural Resources and the U.S. Fish and Wildlife Service will be implemented.

Ordinances and standards pertaining to storm water management, sediment and erosion control will be followed.

Natural vegetation will be retained wherever feasible. Excavations will be limited to right-of-ways where possible.

Appropriate agronomic practices (sediment basins, seeding, mulching) will be provided to control runoff, including shoreline and stream crossings.

Drainage systems, including surface and subsurface drainage, will be returned to their natural state as soon as possible.

When possible, construction activities will be scheduled to avoid excessively wet conditions.

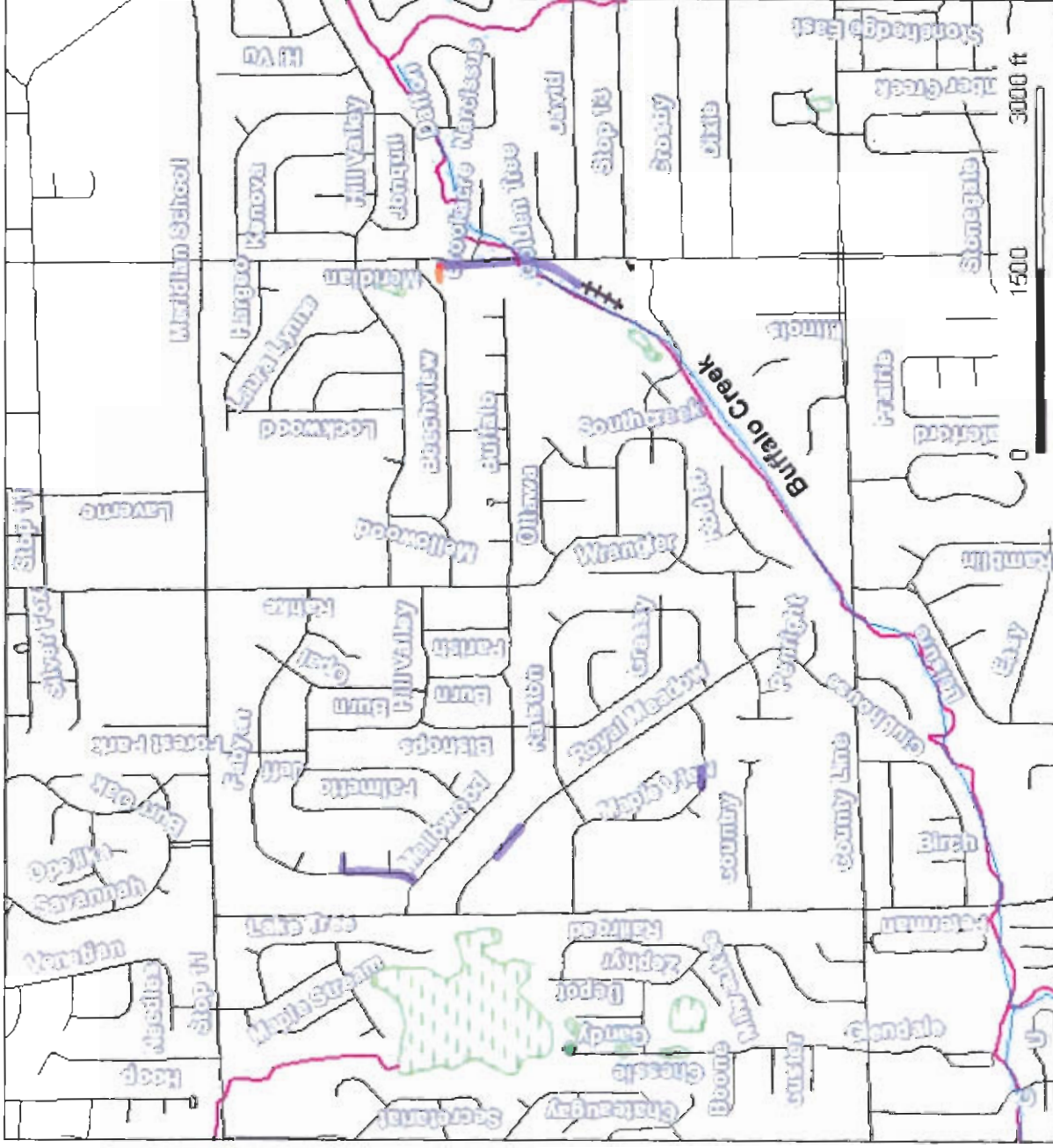
No more than 100 feet of open trench will be allowed. Where possible, excavated material will be kept to the upland side of the trench, excess material will be used elsewhere on the project.

If necessary, discharge from dewatering will be directed to sedimentation basins or controls prior to discharging into surrounding surface waters.

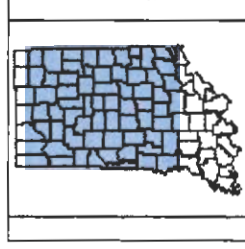
To reduce noise impacts, work activities can be limited to normal daytime hours.

IX. PUBLIC PARTICIPATION

A properly noticed public hearing was held on October 11, 2007 in the City-County Building to discuss the project's PER. No members of the general public attended. No significant comments on this project were voiced at the public hearing, and no written comments were submitted in the five-day period following the public hearing.



Hill Valley Estates Proposed Sewer Work



Legend

- Wetland Points
- Streams (NHD)
- Riverine Wetlands
- Wetlands
- Sewer Rehabilitation (lining)
- Sewer Replacement
- Sewer to be abandoned

FIGURE 1

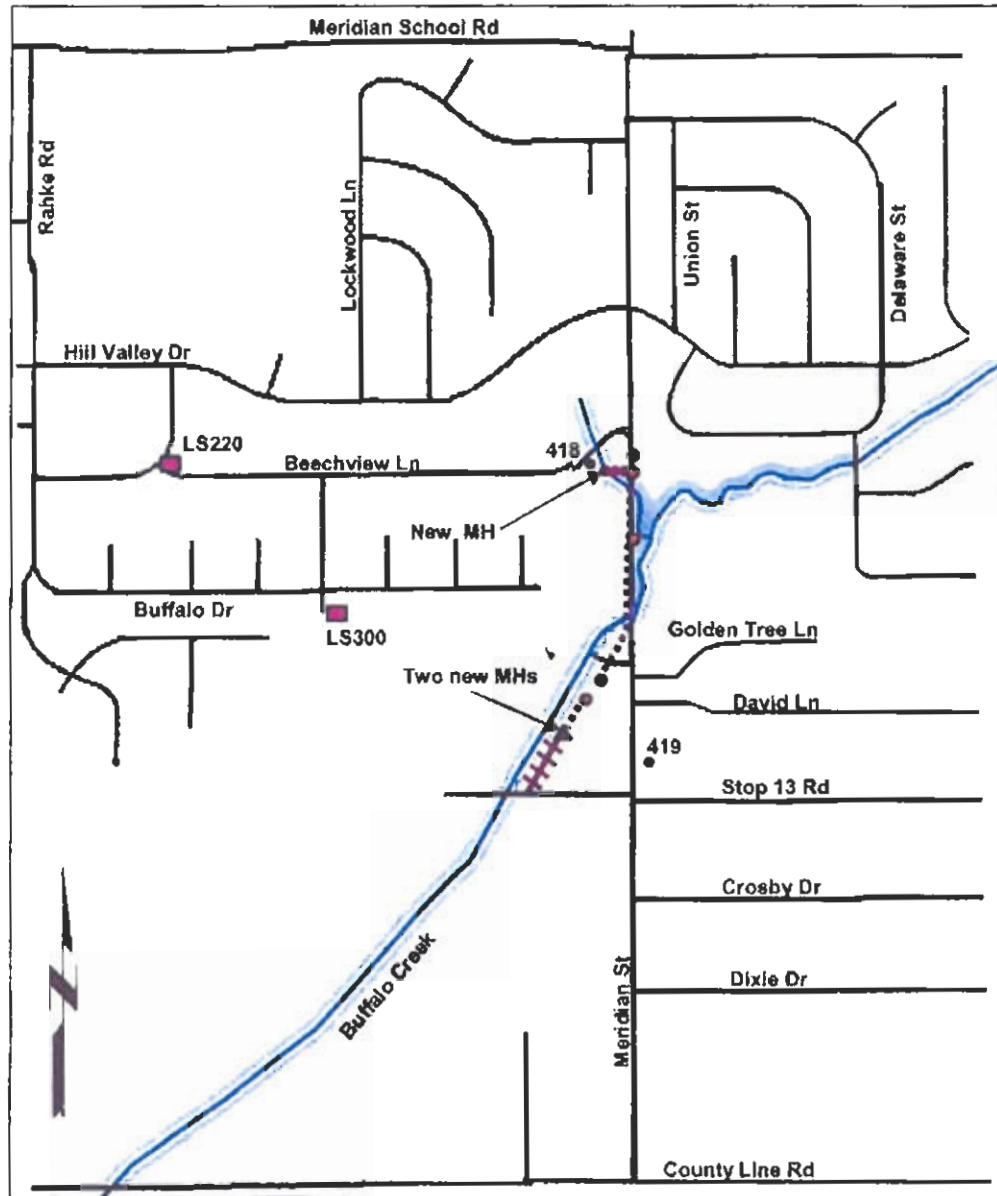
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This map was prepared by the Indiana Geological Survey, using data believed to be accurate; however, a margin of error is inherent in all maps. This product is distributed "AS-IS" without warranty of any kind, either expressed or implied, including but not limited to warranties of suitability for a particular purpose or use. There is no attempt in either design or production of this map to define the limits or jurisdiction of any federal, state or local government. A detailed on-the-ground survey and historical analysis of a single site may differ from this map.

Indiana Geological Survey

Perry Township – Map #27
Sites #85416-418

Perry Township – Map #28
Sites #85419-421



0 500 1000
 DISTANCE IN FEET

LEGEND

- | | |
|------------------------|------------------------|
| Lift Station | Sewer to be Abandoned |
| Sewer Connection Point | Manhole Rehabilitation |
| Sewer Replacement | Stream |
| Sewer Rehabilitation | Historic Site |

BLACK & VEATCH

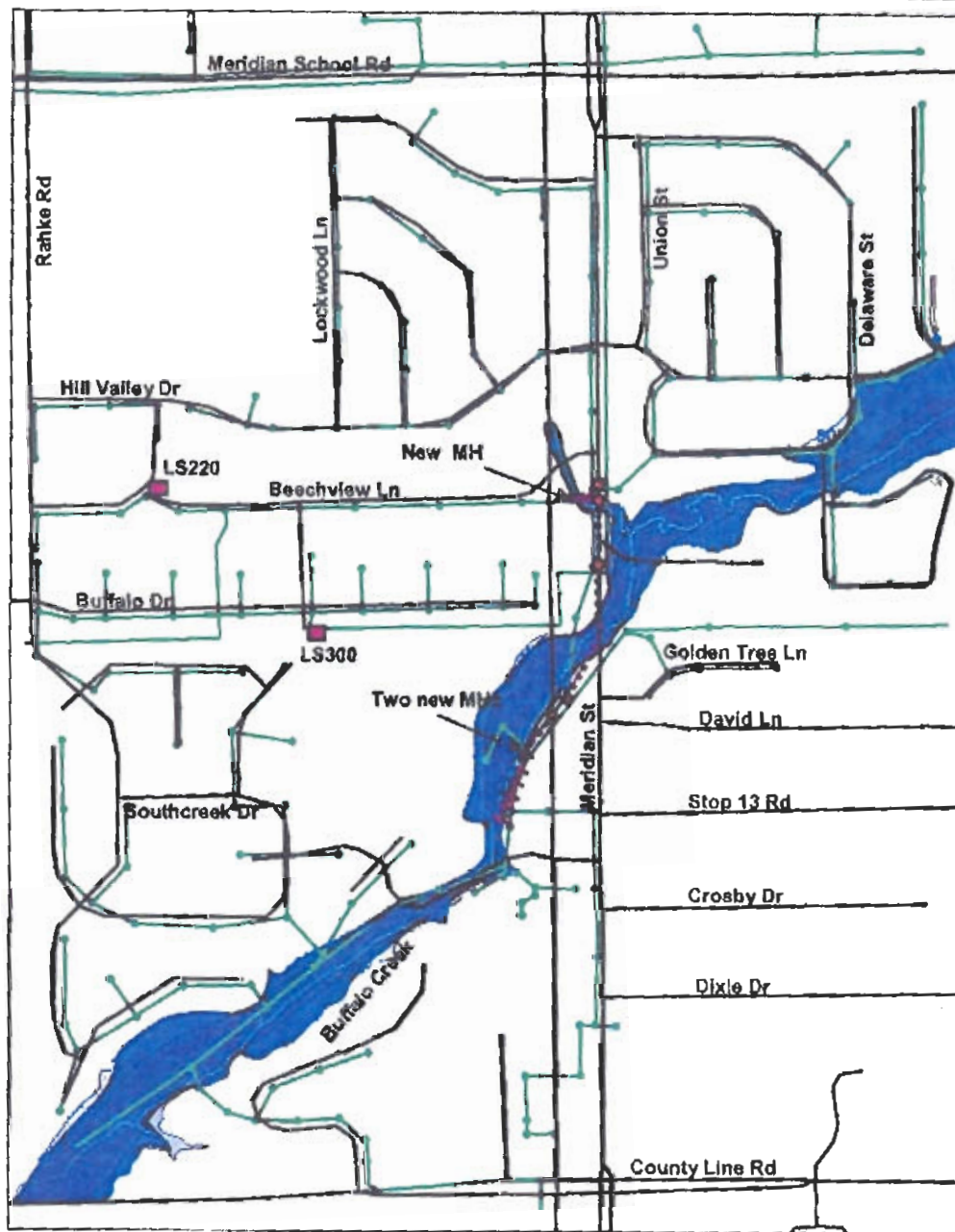
B&V PROJECT NO.
 147136

Revised 11/13/08

CITY OF INDIANAPOLIS DEPARTMENT OF PUBLIC WORKS
 PRELIMINARY ENGINEERING REPORT 6A
 DPW PROJECT NO. SS-46-003

HILL VALLEY ESTATES
HISTORIC SITES MAP

FIGURE 2



0 500 1000
DISTANCE IN FEET

LEGEND

- | | |
|---------------------------------------|------------------------|
| Existing Sanitary Sewer with Manholes | Sewer Rehabilitation |
| Lift Station | Sewer to be Abandoned |
| Sewer Connection Point | Manhole Rehabilitation |
| Sewer Replacement | Stream |
| | 100 Year Flood Zone |



BLACK & VEATCH

B&V PROJECT NO.
147136

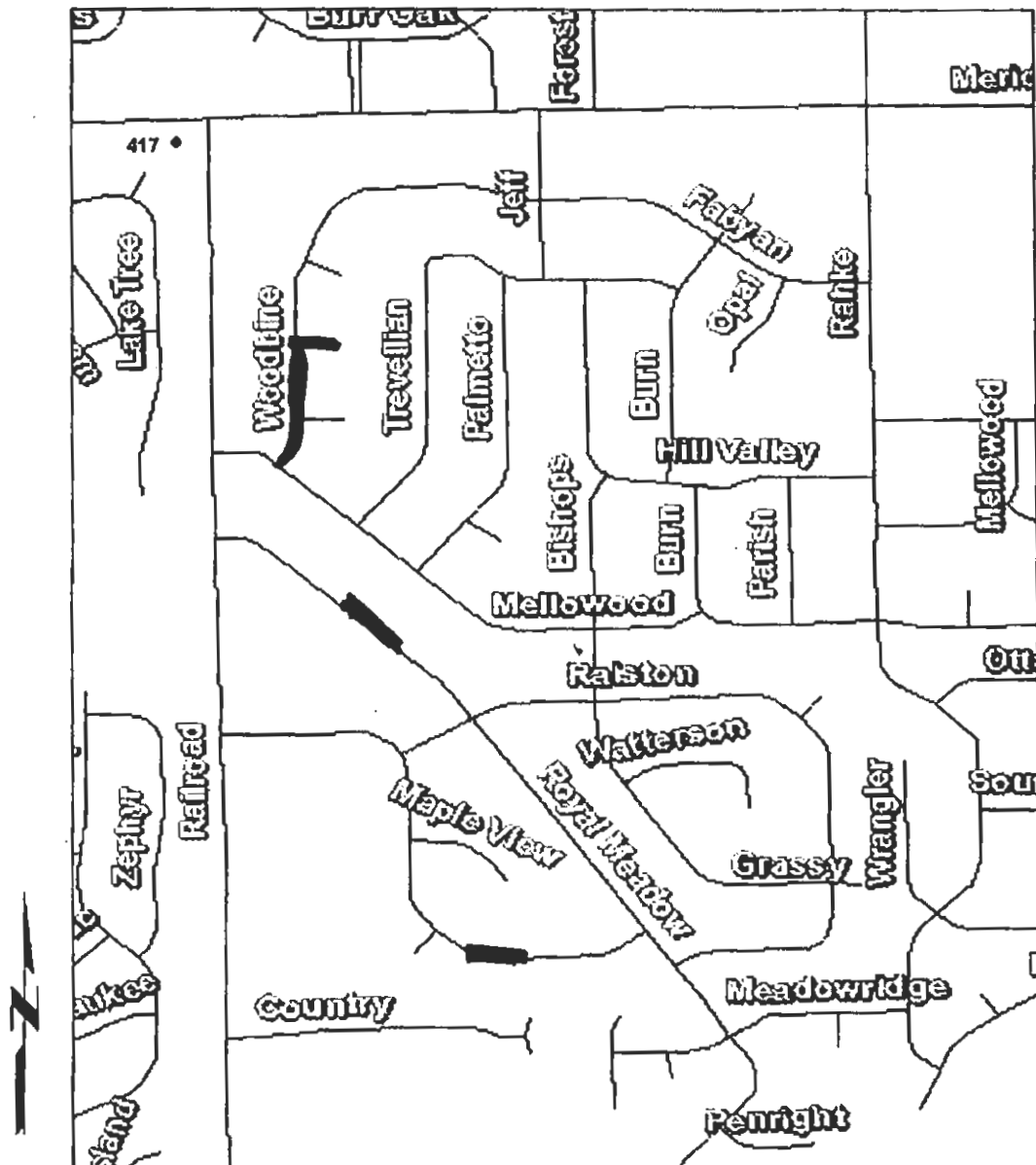
Revised 11/13/08

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PRELIMINARY ENGINEERING REPORT 6A
DPW PROJECT NO. SS-46-003

**HILL VALLEY ESTATES
FLOOD ZONE MAP**

FIGURE 4

Perry Township – Map #27
Sites #85416-418



0 200 400
 DISTANCE IN FEET

LEGEND

Sewer Rehabilitation

Historic Site

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**HILL VALLEY ESTATES
 HISTORIC SITES MAP**

FIGURE 3.